6DV4

Medium-Mu Triode

NUVISTOR TYPE

Having Gold-Plated Envelope and Base Pins to Assure Positive Grounding and Low Pin-Contact Resistance for Oscillator Applications at UHF Frequencies

GENERAL DATA

Electrical:

Heater Characteristics and Ratings *(Design-Maximum Values)*:

Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.135	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode	100 max.	volts
Heater positive with respect to cathode	100 max.	volts

Direct Interelectrode Capacitances (Approx.):

Grid to plate	1.8	pf
Grid to cathode, shell, and heater	4.4	pf
Plate to cathode, shell, and heater	1.9	pf
Plate to cathode	0.25	pf
Heater to cathode	1.4	pf
Grid to cathode	3.7	pf

Characteristics, Class A_1 Amplifier:

Plate Supply Voltage	75	volts
Cathode Resistor	100	ohms
Amplification Factor	35	
Plate Resistance (Approx.)	3100	ohms
Transconductance	11500	μmhos
Plate Current	10.5	ma
Grid Voltage (Approx.) for plate μa = 10	-7	volts

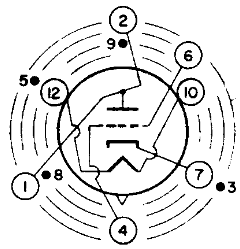
Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	0.800"
Maximum Seated Length	0.625"
Maximum Diameter	0.440"
Envelope	Metal Shell MT4
Socket	Industrial Electronic Hardware Corp. No. MSN0707-1, or equivalent
Base	Medium Ceramic-Wafer Twelvar 7-Pin (JEDEC No. E7-83)

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Basing Designation for BOTTOM VIEW. 12EA

Pin 1 - Plate
Pin 2 - Plate
Pin 3[a] - Do Not Use
Pin 4 - Grid
Pin 5 - Same as Pin 3
Pin 6 - Grid
Pin 7 - Cathode
Pin 8 - Same as Pin 3
Pin 9 - Same as Pin 3
Pin 10 - Heater
Pin 12 - Heater



INDEX = LARGE LUG
● = SHORT PIN

AMPLIFIER — Class A$_1$

Maximum Ratings, *Design-Maximum Values:*

PLATE SUPPLY VOLTAGE	300[b]	max.	volts
PLATE VOLTAGE	125	max.	volts
GRID VOLTAGE:			
Negative-bias value	55	max.	volts
Peak-positive value	2	max.	volts
CATHODE CURRENT	15	max.	ma
PLATE DISSIPATION	1	max.	watt

Typical Operation:

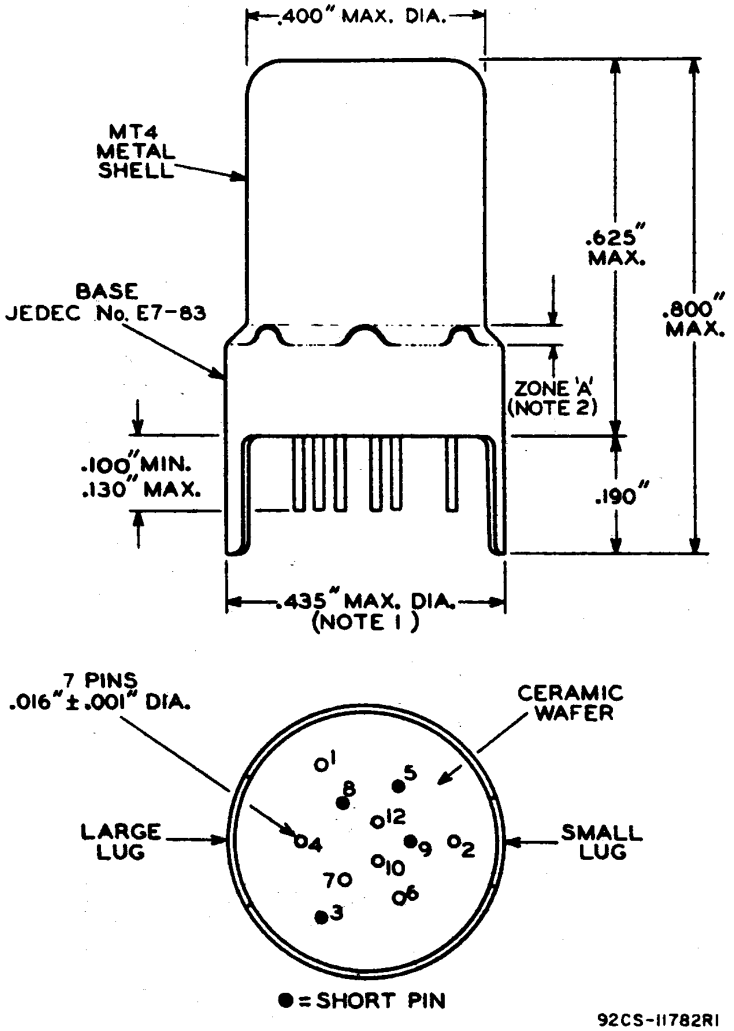
As oscillator at 950 Mc

Plate Voltage	60	volts
Grid Voltage	-2	volts
Grid Resistor	5600	ohms
Plate Current	8	ma
Grid Current	350	μa

Maximum Circuit Values:

Grid-Circuit Resistance:[c]			
For fixed-bias operation	0.1	max.	megohm
For cathode-bias operation	0.2	max.	megohm

[a] Pin is of a length such that its end does not touch the socket insertion plane.
[b] A plate supply voltage of 300 volts may be used provided that a sufficiently large resistor is used in the plate circuit to limit the plate dissipation to one watt under any condition of operation.
[c] For operation at metal-shell temperatures up to 135° C.

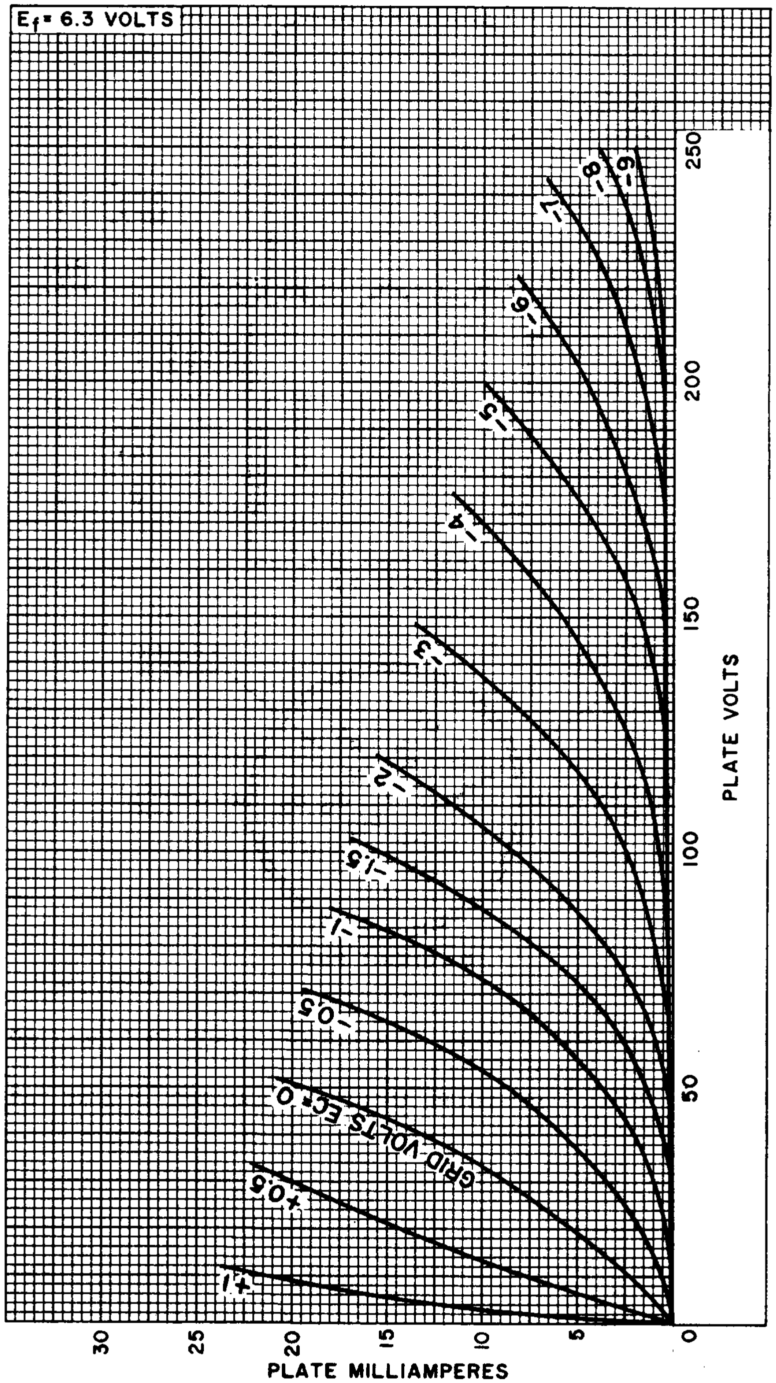


NOTE 1: MAXIMUM OUTSIDE DIAMETER OF 0.440" IS PERMITTED ALONG 0.190" LUG LENGTH.

NOTE 2: SHELL TEMPERATURE SHOULD BE MEASURED IN ZONE "A" BETWEEN BROKEN LINES.

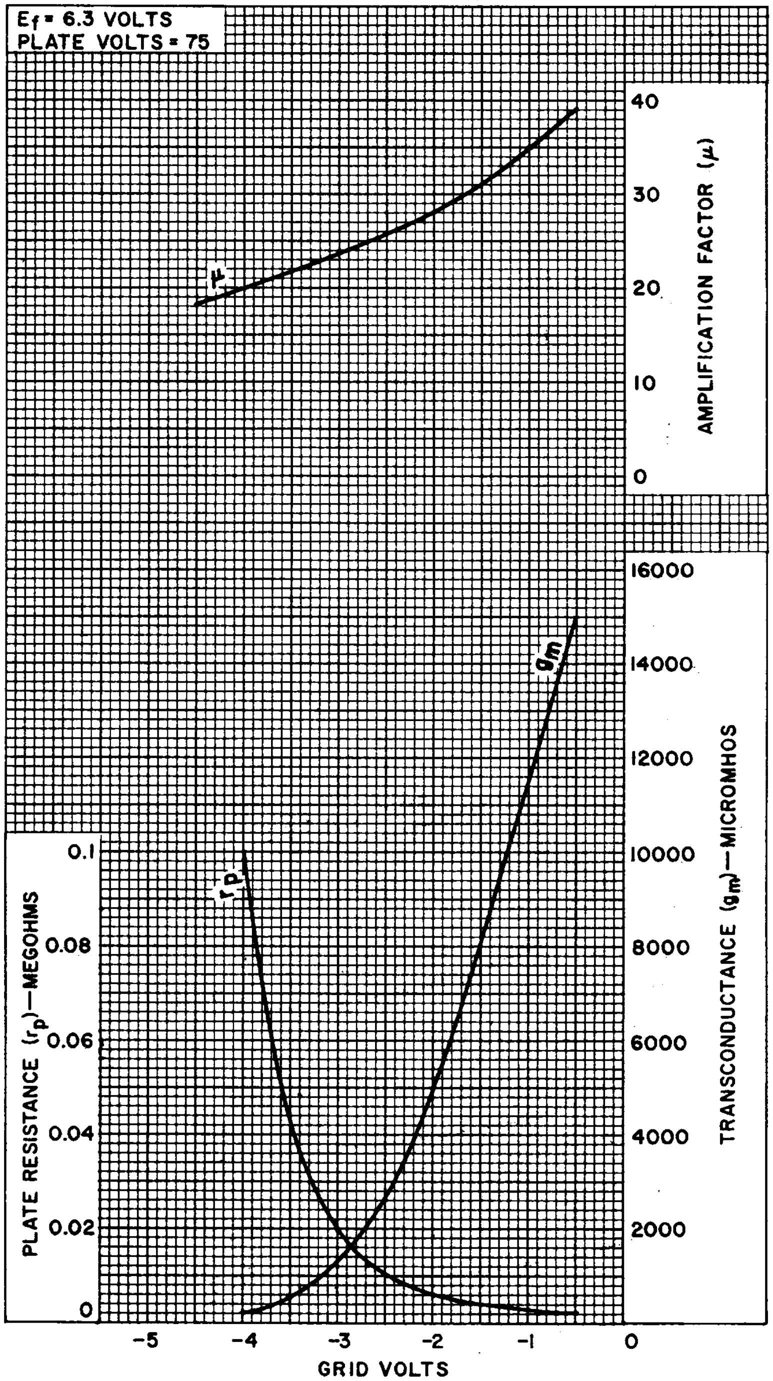
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AVERAGE PLATE CHARACTERISTICS



92CM-11781

AVERAGE CHARACTERISTICS



92CM-11780

6DV4

AVERAGE CHARACTERISTICS

